

Atty. Dkt. No. 03CR418/KE (047141-0350)

REMARKS

Applicants thank the Examiner for the detailed Office Action dated December 12, 2006. Applicants respectfully request reconsideration of the present Application in view of the foregoing amendments and in view of the reasons that follow.

The amendment adds, changes and/or deletes claims in this Application. A detailed listing of all claims that are, or were, in this Application, irrespective of whether the claim(s) remain under examination in the Application, is presented, with an appropriate defined status identifier.

Claims 1-20 were pending in the Application. Claims 1, 4-6, 9, and 12-17 have been amended. Claim 21 is new. No new matter has been added. Accordingly, Claims 1-21 will be pending in this present Application upon entry of this Reply and Amendment.

For simplicity and clarity purposes in responding to the Office Action, Applicants' remarks are primarily focused on the rejections of the independent claims (i.e., claims 1, 9 and 17) outlined in the Office Action, with the understanding that the dependent claims that depend from the independent claims are patentable for at least the same reasons (and in most cases other reasons) that the independent claims are patentable. Applicants expressly reserve the right to argue the patentability of the dependent claims separately in any future proceedings.

Claim Rejections – 35 U.S.C. § 102

Independent Claim 1

On page 2 of the Office Action, the Examiner rejected independent claim 1 under 35 U.S.C. §102(e) as being anticipated by U.S. Pub. No. 2004/0082311 to Shiu et al. ("Shiu").

Shiu shows "a method and apparatus for determining an operational mode for use in a wireless communication system based on a location, a velocity, or both, of a wireless

Atty. Dkt. No. 03CR418/KE (047141-0350)

communication device (WCD) in relation to a wireless network infrastructure” (Shiu Abstract).

Shiu does not identically disclose the combination of elements recited in independent claim 1, as amended. For example, independent claim 1, as amended, recites “sending by a first node a first radio communication to a monitoring node” and “estimating by the monitoring node the dynamics of a communications channel based on a link metric of at least the first radio communication,” which is not identically disclosed in Shiu. Shiu does not appear to disclose a specific monitoring node that utilizes link metric measurements.

Shiu appears to disclose a system that utilizes the “location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure” to select a mode of communication. (Shiu Abstract). Shiu does not disclose a system that utilizes a specific monitoring node that utilizes link metric measurements. Since Shiu does not appear to disclose a specific monitoring node that utilizes link metric measurements, Shiu does not anticipate claim 1.

Applicants respectfully submit that the subject matter recited in independent claim 1, as amended, and the claims which are dependent thereon, are not anticipated and would not have been obvious to a person of ordinary skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of claims 1-4 and 8 under 35 U.S.C. § 102(e).

Independent Claim 9

On page 2, the Examiner rejected independent claim 9 under 35 U.S.C. §102(e) as being anticipated by U.S. Pub. No. 2004/0082311 to Shiu et al. (“Shiu”).

Shiu shows “a method and apparatus for determining an operational mode for use in a wireless communication system based on a location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure” (Shiu Abstract).

Atty. Dkt. No. 03CR418/KE (047141-0350)

Shiu does not identically disclose the combination of elements recited in independent claim 9, as amended. For example, independent claim 9, as amended, recites “detecting interference by utilizing a monitoring node that receives communication signals in an open loop mode” and “estimating using an open loop estimator, a channel dynamics,” which is not identically disclosed in Shiu. Shiu does not appear to disclose a specific monitoring node that utilizes an open loop estimator.

Shiu appears to disclose a system that utilizes the “location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure” to select a mode of communication. (Shiu Abstract). Shiu does not disclose a system that utilizes a specific monitoring node that utilizes an open loop estimator. Since Shiu does not appear to disclose a specific monitoring node that utilizes an open loop estimator, Shiu does not anticipate claim 9.

Applicants respectfully submit that the subject matter recited in independent claim 9, as amended, and the claims which are dependent thereon, are not anticipated and would not have been obvious to a person of ordinary skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of claims 9-12 and 16 under 35 U.S.C. § 102(e).

Independent Claim 17

On page 2, the Examiner rejected independent claim 17 under 35 U.S.C. §102(e) as being anticipated by U.S. Pub. No. 2004/0082311 to Shiu et al. (“Shiu”).

Shiu shows “a method and apparatus for determining an operational mode for use in a wireless communication system based on a location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure” (Shiu Abstract).

Shiu does not identically disclose the combination of elements recited in independent claim 17, as amended. For example, independent claim 17, as amended, recites “the first radio

Atty. Dkt. No. 03CR418/KE (047141-0350)

node configured to send a first radio communication to a monitoring node and a second radio node” and “a processor coupled to the monitoring node that generates an open loop metric to estimate channel dynamics,” which is not identically disclosed in Shiu. Shiu does not appear to disclose a specific monitoring node that generates an open loop metric.

Shiu appears to disclose a system that utilizes the “location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure” to select a mode of communication. (Shiu Abstract). Shiu does not disclose a system that utilizes a specific monitoring node that generates an open loop metric. Since Shiu does not appear to disclose a specific monitoring node that generates an open loop metric, Shiu does not anticipate claim 17.

Applicants respectfully submit that the subject matter recited in independent claim 17, as amended, and the claims which are dependent thereon, are not anticipated and would not have been obvious to a person of ordinary skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of claims 17-19 under 35 U.S.C. § 102(e).

Claim Rejections – 35 U.S.C. § 103

Dependent Claims 5, 6, 13, and 14

On page 5 of the Office Action, the Examiner rejected dependent claims 5, 6, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pub. No. 2004/0082311 to Shiu et al. (“Shiu”) in view of U.S. Pub. No. 2005/0032514 to Sadri et al. (“Sadri”). These rejections should be withdrawn, because the cited references fail to disclose, teach, or suggest these claims.

Applicants respectfully submit that the combination of the cited references would not result in the subject matter recited in dependent claims 5, 6, 13, and 14 because the proposed modification of Shiu in combination with Sadri does not disclose, teach or suggest a monitoring node that calculates the dynamics of a communications channel, as required by dependent claims 5, 6, 13, and 14.

Atty. Dkt. No. 03CR418/KE (047141-0350)

Shiu shows “a method and apparatus for determining an operational mode for use in a wireless communication system based on a location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure” (Shiu Abstract).

Shiu does not disclose, teach or suggest the combination of elements recited in dependent claims 5, 6, 13, and 14. On page 6 of the Office Action, the Examiner stated “Shiu does not mention the signal to noise ratio (SNR) or the symbol error rate (SER).” Further, Shiu does not disclose, teach or suggest a monitoring node that calculates the dynamics of a communications channel, which is required by dependent claims 5, 6, 13, and 14. Shiu does not appear to disclose, teach or suggest a specific monitoring node that calculates the dynamics of a communications channel, signal to noise ratio (SNR) nor the symbol error rate (SER).

Sadri shows an “apparatus and associated methods to perform intelligent transmit power control with subcarrier puncturing in a multicarrier wireless communication channel.” (Sadri, Abstract). Sadri does not disclose, teach or suggest the combination of elements recited in dependent claims 5, 6, 13, and 14. For example, these claims recite a monitoring node that calculates the dynamics of a communications channel, which is not disclosed, taught or suggested in Sadri. Sadri does not appear to disclose, teach or suggest a specific monitoring node that calculates the dynamics of a communications channel.

The Examiner has cited to no teaching in the prior art of a monitoring node that calculates the dynamics of a communications channel. The Examiner's failure to provide a citation to the art of record is not surprising, because the only evidence in the record of a teaching of such a feature is contained in the present Application. Of course, any reliance on the present Application would constitute impermissible hindsight reasoning.

Applicants respectfully request withdrawal of the rejection of claims 5, 6, 13, and 14 since Shiu in combination with Sadri does not disclose, teach or suggest a monitoring node that calculates the dynamics of a communications channel.

Atty. Dkt. No. 03CR418/KE (047141-0350)

Applicants respectfully submit that the subject matter recited in dependent claims 5, 6, 13, and 14 would not have been obvious to a person of ordinary skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of claims 5, 6, 13, and 14 under 35 U.S.C. § 103(a).

Dependent Claims 7 and 15

On page 6 of the Office Action, the Examiner rejected dependent claims 7 and 15 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pub. No. 2004/0082311 to Shiu et al. ("Shiu") in view of U.S. Pub. No. 2004/0005905 to Petrus et al. ("Petrus"). These rejections should be withdrawn, because the cited references fail to disclose, teach, or suggest these claims.

Applicants respectfully submit that the combination of the cited references would not result in the subject matter recited in dependent claims 7 and 15 because the proposed modification of Shiu in combination with Petrus does not disclose, teach or suggest a monitoring node that calculates the dynamics of a communications channel, as required by dependent claims 7 and 15.

Shiu shows "a method and apparatus for determining an operational mode for use in a wireless communication system based on a location, a velocity, or both, of a wireless communication device (WCD) in relation to a wireless network infrastructure" (Shiu Abstract).

Shiu does not disclose, teach or suggest the combination of elements recited in dependent claims 7 and 15. On page 7 of the Office Action, the Examiner stated "Shiu does not mention wherein the first radio communication includes a message header with a transmission power indicator." Further, Shiu does not disclose, teach or suggest a monitoring node that calculates the dynamics of a communications channel, which is required by dependent claims 7 and 15. Shiu does not appear to disclose, teach or suggest a specific monitoring node that calculates the

Atty. Dkt. No. 03CR418/KE (047141-0350)

dynamics of a communications channel nor a first radio communication including a message header with a transmission power indicator.

Petrus shows an apparatus which "receive a signal, determine a quality of the received signal, and transmit a power control message, with a selected size, to request a modification in transmission power...." (Petrus, Abstract). Petrus does not disclose, teach or suggest the combination of elements recited in dependent claims 7 and 15. For example, these claims recite a monitoring node that calculates the dynamics of a communications channel, which is not disclosed, taught or suggested in Petrus. Petrus does not appear to disclose, teach or suggest a specific monitoring node that calculates the dynamics of a communications channel.

The Examiner has cited to no teaching in the prior art of a monitoring node that calculates the dynamics of a communications channel. The Examiner's failure to provide a citation to the art of record is not surprising, because the only evidence in the record of a teaching of such a feature is contained in the present Application. Of course, any reliance on the present Application would constitute impermissible hindsight reasoning.

Applicants respectfully request withdrawal of the rejection of claims 7 and 15 since Shiu in combination with Petrus does not disclose, teach or suggest a monitoring node that calculates the dynamics of a communications channel.

Applicants respectfully submit that the subject matter recited in dependent claims 7 and 15 would not have been obvious to a person of ordinary skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of claims 7 and 15 under 35 U.S.C. § 103(a).

Dependent Claim 20

On page 8 of the Office Action, the Examiner rejected dependent claim 20 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pub. No. 2004/0082311 to Shiu et al. ("Shiu") in

Atty. Dkt. No. 03CR418/KE (047141-0350)

view of U.S. Pub. No. 2004/0014482 to Kwak et al. ("Kwak"). These rejections should be withdrawn, because the cited references fail to disclose, teach, or suggest this claim.

Applicants respectfully submit that the combination of the cited references would not result in the subject matter recited in dependent claim 20 because the proposed modification of Shiu in combination with Kwak does not disclose, teach or suggest a **monitoring node** that calculates the **dynamics of a communications channel**, as required by dependent claim 20.

Shiu shows "a method and apparatus for determining an operational mode for use in a wireless communication system **based on a location, a velocity, or both**, of a wireless communication device (WCD) in relation to a wireless network infrastructure" (Shiu Abstract).

Shiu does not disclose, teach, or suggest the combination of elements recited in dependent claim 8. On page 8 of the Office Action, the Examiner stated "Shiu does not mention the transmission power indicator from the first node." Further, Shiu does not disclose, teach, or suggest a **monitoring node** that calculates the **dynamics of a communications channel**, which is required by dependent claim 20. Shiu does not appear to disclose, teach, or suggest a specific monitoring node that calculates the dynamics of a communications channel nor utilizing a transmission power indicator from the first node.

Kwak shows an "apparatus and method for providing service based multiple data rates in mobile communication system." (Kwak, Title). Kwak does not disclose, teach, or suggest the combination of elements recited in dependent claim 20. For example, these claims recite a **monitoring node** that calculates the **dynamics of a communications channel**, which is not disclosed, taught or suggested in Kwak. Kwak does not appear to disclose, teach, or suggest a specific monitoring node that calculates the dynamics of a communications channel.

The Examiner has cited to no teaching in the prior art of a **monitoring node** that calculates the **dynamics of a communications channel**. The Examiner's failure to provide a

Atty. Dkt. No. 03CR418/KE (047141-0350)

citation to the art of record is not surprising, because the only evidence in the record of a teaching of such a feature is contained in the present Application. Of course, any reliance on the present Application would constitute impermissible hindsight reasoning.

Applicants respectfully request withdrawal of the rejection of claim 20 since Shiu in combination with Kwak does not disclose, teach or suggest a **monitoring node** that calculates the **dynamics of a communications channel**.

Applicants respectfully submit that the subject matter recited in dependent claim 20 would not have been obvious to a person of ordinary skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of claim 20 under 35 U.S.C. § 103(a).

* * *

Applicants believe that the present Application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Atty. Dkt. No. 03CR418/KE (047141-0350)

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

Date

3/8/2007

By



ROCKWELL COLLINS, INC.
400 Collins Road, NE
Cedar Rapids, IA 52498
Telephone: (319) 295-8280
Facsimile: (319) 295-8777
Customer No. 26383

Kyle Epele
Attorney for Applicants
Registration No. 34,155